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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
CHAWAN, VIJAY B	
ART UNIT	PAPER NUMBER
2626	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/522,769	ARIAV, ARIE	
	Examiner	Art Unit	
	Vijay B. Chawan	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 June 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-20 rejected under 35 U.S.C. 102(b) as being anticipated by Tzirkel-Hancock (5,960,395).

As per claim 1, Tzirkel-Hancock teaches a voice controlled system, comprising:

a microphone for receiving voice commands and for converting each voice command to an electrical output (Col.5, line 66, Fig.1, item 7);

a filter system connected to receive the electrical outputs of the microphone and to produce for each voice command a first output corresponding to the high-frequency component of the voice command, and a second output corresponding to the low-frequency component of the voice command; and a processor for processing said first and second outputs of the filter system and for outputting, for each voice command, a first electrical signal when the low-frequency component precedes the high-frequency component in the respective voice command, and a second electrical signal when the high-frequency component precedes the low-frequency component in the respective voice command (Col.10, lines 6-15, Col.38, line 28 – Col.41, line 59).

As per claim 1, analyzing at the claim scope "outputting, for each voice command, a first electrical signal when the low-frequency component precedes the high-frequency component in the respective voice command, and a second electrical signal when the high-frequency component precedes the low-frequency component in the respective voice command." in light of the specification the following judgments were made;

High frequency component preceding low frequency component is equivalent to “stop” command, and, low frequency component preceding high frequency component is equivalent to “yes” command. Tzirkel-Hancock teaches both of these commands. In Col.38, lines 65-67, Tzirkel-Hancock teaches the “yes” command which is controlled by general control processor which is deemed equivalent to the “low frequency component preceding high frequency component.” In Col.41, lines 54-57, Tzirkel-Hancock teaches the “stop” command, which is equivalent to the high frequency component preceding the low frequency component.” Tzirkel-Hancock teaches both the “yes” and “stop” output, and therefore both of these conditions are met by the Tzirkel-Hancock reference in the cited passage.

As per claim 2, Tzirkel-Hancock teaches the voice controlled system according to claim 1, wherein said voice commands include a "Yes" command, wherein the low-frequency component from the filter system precedes the high-frequency component, and which is indicated by said first electrical signal output from the processor; and a "Stop" command, wherein the high-frequency component from the filter system precedes the low-frequency component and which is indicated by said second electrical

signal outputted from the processor (Col.10, lines 6-15, Col.38, line 28 – Col.41, line 59).

As per claim 3, Tzirkel-Hancock teaches the voice controlled system according to claim 1, wherein said processor, in processing said first and second outputs of the filter system for each voice command, outputs a third electrical signal when the first output of the filter system, corresponding to the high-frequency component of the voice command, is below a predetermined threshold (Col.10, lines 6-15, Col.38, line 28 – Col.41, line 59).

As per claim 4, Tzirkel-Hancock teaches the voice controlled system according to claim 3, wherein said voice commands also include a "No" command, which is indicated by said third electrical signal output from the processor (Col.10, lines 6-15, Col.38, line 28 – Col.41, line 59).

As per claim 5, Tzirkel-Hancock teaches the voice controlled system according to claim 1, wherein said first output produced by the filter system for each voice command corresponds to the component of the voice command having the frequency of the "S" sound, wherein said second output produced by the filter system for each voice command corresponds to the component of the voice command below the frequency of the "S" sound (Col.10, lines 6-15, Col.38, line 28 – Col.41, line 59).

As per claim 6, Tzirkel-Hancock teaches the voice controlled system according to claim 1, wherein said first output produced by the filter system for each voice command corresponds to the component of the voice command above 1 KHz, and wherein the second output produced by the filter system for each voice command corresponds to

the component of the voice command below 1 KHz (Col.10, lines 6-15, Col.38, line 28 – Col.41, line 59).

As per claim 7, Tzirkel-Hancock teaches the voice controlled system according to claim 1, wherein said filter system includes a high-frequency pass filter connected to receive said microphone output for each command and to produce said first output corresponding to the high-frequency component of the voice command; and a low-frequency pass filter connected to receive said microphone output for each command and to produce said second output corresponding to the low-frequency component of the voice command(Col.10, lines 6-15, Col.38, line 28 – Col.41, line 59).

As per claim 8, Tzirkel-Hancock teaches a voice controlled system, comprising:

a microphone for receiving voice commands and for converting each voice command to an electrical output (Col.5, line 66, Fig.1, item 7); a filter system connected to receive the electrical outputs of the microphone and to produce, for each voice command, a first output corresponding to the high-frequency component of the voice command, and a second output corresponding to the low-frequency component of the voice command; and a processor for processing said first and second outputs of the filter system for each voice command and for outputting one electrical signal when the low-frequency component precedes the high-frequency component in the respective voice command, and another electrical signal when said first output of the filter system for each voice command, corresponding to the high-frequency component of the voice command, is below a predetermined threshold (Col.10, lines 6-15, Col.38, line 28 – Col.41, line 59).

As per claim 9, Tzirkel-Hancock teaches the voice controlled system according to claim 8, wherein said voice command includes a "YES" command, which is indicated by said one electrical signal outputted from the processor, and a "NO" command, which is indicated by said another electrical signal output from the processor (Col.10, lines 6-15, Col.38, line 28 – Col.41, line 59).

As per claim 10, Tzirkel-Hancock teaches the voice controlled system according to claim 9, wherein said processor, in processing said first and second outputs of the filter system for each voice command, also outputs a further electrical signal when the high-frequency component of the voice command precedes the low-frequency component in the respective voice command.

As per claim 11, Tzirkel-Hancock teaches the voice controlled system according to claim 10, wherein said voice commands include a "Stop" command which is indicated by said further electrical signal outputted from the processor (Col.10, lines 6-15, Col.38, line 28 – Col.41, line 59).

As per claim 12, Tzirkel-Hancock teaches the voice controlled system according to claim 10, wherein said first output produced by the filter system for each voice command corresponds to the component of the voice command having the frequency of the "S" sound, wherein said second output produced by the filter system for each voice command corresponds to the component of the voice command below the frequency of the "S" sound (Col.10, lines 6-15, Col.38, line 28 – Col.41, line 59).

As per claim 13, Tzirkel-Hancock teaches the voice controlled system according to claim 10, wherein said first output produced by the filter system for each voice

command corresponds to the component of the voice command above 1 KHz, and wherein the second output produced by the filter system for each voice command corresponds to the component of the voice command below 1 KHz (Col.10, lines 6-15, Col.38, line 28 – Col.41, line 59).

As per claim 14, Tzirkel-Hancock teaches the voice controlled system according to claim 10, wherein said filter system includes a high-frequency pass filter connected to receive said microphone output for each command and to produce said first output corresponding to the high-frequency component of the voice command; and a low-frequency pass filter connected to receive said microphone output for each command and to produce said second output corresponding to the low-frequency component of the voice command (Col.10, lines 6-15, Col.38, line 28 – Col.41, line 59).

As per claim 15, Tzirkel-Hancock teaches a method of controlling a device by voice commands, comprising: providing the device with:

a microphone for receiving voice commands and for converting each voice command to an electrical output (Col.5, line 66, Fig.1, item 7); a filter system connected to receive the electrical outputs of the microphone and to produce for each voice command a first output corresponding to the high-frequency component of the voice command, and a second output corresponding to the low-frequency component of the voice command; and a processor for processing said first and second outputs of the filter system and for outputting, for each voice command, a first electrical signal when the low-frequency component precedes the high-frequency component in the respective voice command, and a second electrical signal when the high-frequency component

precedes the low-frequency component in the respective voice command; and controlling said device in accordance with the signals outputted from said processor (Col.10, lines 6-15, Col.38, line 28 – Col.41, line 59).

As per claim 16, Tzirkel-Hancock teaches the method controlled system according to claim 15, wherein said first output produced by the filter system for each voice command corresponds to the component of the voice command having the frequency of the "S" sound, wherein said second output produced by the filter system for each voice command corresponds to the component of the voice command below the frequency of the "S" sound (Col.10, lines 6-15, Col.38, line 28 – Col.41, line 59).

As per claim 17, Tzirkel-Hancock teaches the method controlled system according to claim 15, wherein said first output produced by the filter system for each voice command corresponds to the component of the voice command above 1 KHz, and wherein the second output produced by the filter system for each voice command corresponds to the component of the voice command below 1 KHz (Col.10, lines 6-15, Col.38, line 28 – Col.41, line 59).

As per claim 18, Tzirkel-Hancock teaches the method controlled system according to claim 15, wherein said voice commands include a "Yes" command, wherein the low-frequency component from the filter system precedes the high-frequency component, and which is indicated by said first electrical signal output from the processor; and a "Stop" command, wherein the high-frequency component from the filter system precedes the low-frequency component and which is indicated by said

second electrical signal outputted from the processor (Col.10, lines 6-15, Col.38, line 28 – Col.41, line 59).

As per claim 19, Tzirkel-Hancock teaches the method controlled system according to claim 15, wherein said processor, in processing said first and second outputs of the filter system for each voice command, outputs a third electrical signal when the first output of the filter system, corresponding to the high-frequency component of the voice command, is below a predetermined threshold (Col.10, lines 6-15, Col.38, line 28 – Col.41, line 59).

As per claim 20, Tzirkel-Hancock teaches the method controlled system according to claim 19, wherein said voice commands also include a "No" command, which is indicated by said third electrical signal output from the processor (Col.10, lines 6-15, Col.38, line 28 – Col.41, line 59).

Response to Arguments

3. Applicant's arguments filed 6/26/08 have been fully considered but they are not persuasive. Applicants argue that “The system of the cited reference is, therefore, considerably more complicated than the simple system of the present invention as defined in claim 1, since the referenced system, not only divides the command into time frames, determines a particular characteristic of each time frame, produces a "model" of each frame, and updates that model, in order to identify the particular command. In the invention of the present application, however, all that is necessary is to filter the signal

of the respective spoken command, produce a high-frequency component and a low-frequency component of the respective command, and compare which component precedes the other." In response to Applicant's argument that includes additional elements not required by Applicant's invention, it must be noted that the prior art reference of Tzirkel-Hancock discloses the invention as claimed. The fact that it discloses additional elements not claimed is irrelevant.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vijay B. Chawan whose telephone number is (571) 272-7601. The examiner can normally be reached on Monday Through Friday 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Vijay B. Chawan/
Primary Examiner, Art Unit 2626

vbc
9/30/08